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GUNNISON COPPER PROJECT

1.1 Location

The Gunnison Copper Project (the “Project”) is a proposed in situ recovery (ISR) copper mine located in Cochise County, Arizona, approximately 62 miles east of Tucson and 17 miles west of Willcox. The location is along Interstate 10 (I-10) approximately 1.5 miles south east of the Johnson Camp Mine, in the Cochise Mining District. It was previously known as “the I-10 Deposit” (Kantor, 1977). ISR mining will occur adjacent to and both north and south of the I-10 freeway. Mining solutions will initially (Stage 1) be pumped to, and processed at, the company’s adjacent Johnson Camp Mine. Later Stages will require additional facilities to be built at the Project site.

1.2 Project Description

The Project consists of a copper mine that will encompass an area of approximately 700 acres. Within this area, copper will be extracted using the ISR mining method from oxide mineralization located along fractures within the North Star deposit.

1.2.1 Mining Method

The ISR method involves injecting low-pH barren solutions (raffinate) into the naturally fractured orebody using an array of closely spaced (~100’ spaced) injection wells. Intermingled with the array of injection wells is an approximately equal array of recovery wells that apply pumping pressure to draw the raffinate solution through the broken rock. As the solution moves from injection to recovery well, it dissolves copper oxide minerals creating a copper-bearing solutions (pregnant leach solution or PLS). This solution is then pumped to the surface through the recovery wells, collected, and then pumped to the processing facilities.

ISR is the preferred mining method for the deposit due to the fractured nature of the host rock, the presence of water-saturated joints and fractures within the orebody, and copper mineralization that preferentially occurs along fracture surfaces. The ISR method avoids the challenges of open pit mining in an area with basin fill overburden thickness exceeding 400 feet and greatly simplifies reclamation and closure because there will be no open pit, waste rock stockpiles, or tailings impoundments.

1.2.2 Life of Mine and Proposed Operation Schedule

The anticipated operational life of permitted facilities is 23 years. Construction will begin upon issuance of applicable permits, subject to funding schedules. The target start date for construction is middle to late 2017, with commercial copper production in 2018.

Mine operations will be implemented in stages:

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| • Stage 1 | Years 1 – 10 | 25 million pounds copper per year |
| • Stage 2 | Years 11 – 13 | 75 million pounds copper per year |
| • Stage 3 | Years 13 – 20 | 125 million pounds copper per year |
| • Post production | Years 20 – 23 | - |

The actual duration of each stage may vary, depending on economic conditions. Multiple mining blocks will be active during each stage. As mining of individual blocks is completed, the mining operations will be followed by a rinsing period while mining proceeds to subsequent blocks. The final rinsing period for the last mining block is anticipated to be completed by year 23.

1.2.3 Project Facilities

Project facilities for Stage 1 (Figure 1) include the following (items in bold are pre-existing):

- Years 1-10 ISR wellfield with related pipes, power supply and header houses (small manifold and instrumentation control rooms within the ISR wellfield)
- Interconnecting pipe line corridor (“pipe-corridor”) from the ISR wellfield to the existing **Johnson Camp Mine SXEW processing facility, solution ponds, power supply and related infrastructure, roads and office buildings.**
- Pipe conduit under the I-10 freeway.
- Drain-down pond at the low point of the pipe-corridor to collect and temporarily hold solutions contain in the pipes should pipe maintenance be required.
- Access road and guard house on the southwestern edge of the ISR wellfield.
- Evaporation pond located east of the ISR wellfield and on the south side of the 1-10 freeway.

Project facilities for Stages 2 and 3 (Figure 2) include the following (items in bold are pre-existing or are included in Stage 1 above):

- Expanded ISR wellfield with related pipes, power supply and header houses.
- **Interconnecting pipe line corridor (“pipe-corridor”) from the ISR wellfield to the existing Johnson Camp Mine SXEW processing facility, solution ponds, power supply and related infrastructure, roads and office buildings.**
- **Pipe conduit under the I-10 freeway.**
- **Drain-down pond at the low point of the pipe-corridor to collect and temporarily hold solutions contain in the pipes should pipe maintenance be required.**
- **Access road and guard house on the south western edge of the ISR wellfield.**

- **Evaporation pond located east of the ISR wellfield and on the south side of the 1-10 freeway**
- Additional SXEW processing facilities with related infrastructure, power supply, office building and process ponds, located on the south side of the I-10 freeway and to the east of the ISR wellfield.

1.2.4 Process Description and Layout

At the surface, process solution impoundments at JCM will be used during Stage 1 to hold raffinate and PLS solutions. Additional impoundments will be constructed south of the freeway during Stages 2 and 3. Copper will be removed from the PLS at the JCM solvent extraction-electrowinning (SX-EW) plant, producing pure copper cathode. After copper has been removed from the PLS, the remaining raffinate (barren solution), is re-acidified and pumped back to the ISR wellfield to continue the leaching cycle. Additional SX-EW capacity will be built the east of the ISR wellfield for Stages 2 and 3.

Post mining the ISR wellfield will be rinsed to meet permit conditions and after appropriate monitoring will be closed according to relevant government regulations.